From: Ramach, Sean
To: Rosenberg, Kathryn
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval
Date: Wednesday, June 30, 2021 9:14:02 AM
Attachments: DECO-Monroe History of Receiving Water.pdf

Hi Katie,

It was in the new folder, but attached here. I did look up the congressional act at one point, but I do not think I saved a copy.

Cheers,
Sean Ramach
Environmental Scientist | P:202-564-2865 | ramach.sean@epa.gov
U.S. EPA, OWM, WPD, National Programs Branch | 1200 Pennsylvania Ave., 4203M | Washington, DC 20460
For packages or overnight delivery, please mail to: 1201 Constitution Ave., 4203M, Washington DC 20004


Please consider the environment before printing this e-mail.

From: Rosenberg, Kathryn <Rosenberg.Kathryn@epa.gov>
Sent: Wednesday, June 30, 2021 8:27 AM
To: Ramach, Sean <Ramach.Sean@epa.gov>
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

Hey Sean,

Thanks again for all the background info on Monroe yesterday. Would you mind sending me over the history of the WOTUS/congressional action that you were talking about yesterday?

-Katie

From: Rosenberg, Kathryn
Sent: Wednesday, June 23, 2021 9:29 AM
To: Ramach, Sean <Ramach.Sean@epa.gov>
Subject: FW: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

Good morning, Sean.

Just curious, do you have any more information about the DTE-Monroe Plt permit (MI0001848)? Mark Ackerman and I are working on reviewing this permit now and we're both curious about the history. For example, why it was never reissued, what your final 316 determinations were, and if EPA completed a review in 2015.

Looks like David Soong was assigned to the last review, but searching ECMS hasn't helped us much so far. Any background info you have from the last review would be appreciated!

Thank you,

Katie Rosenberg (she/her)
Permits Branch | USEPA-Region 5
77 W. Jackson Blvd, WP-16J
Chicago, IL 60604
rosenberg.kathryn@epa.gov | 312-886-6774

From: Buckmaster, Tarek (EGLE) <BUCKMASTERT@michigan.gov>
Sent: Tuesday, June 22, 2021 10:20 AM
To: Rosenberg, Kathryn <Rosenberg.Kathryn@epa.gov>
Cc: Ackerman, Mark <ackerman.mark@epa.gov>; Aiello, Christine (DEQ) <AielloC@michigan.gov>; alexanderc2@michigan.gov
Subject: FW: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

As requested.

Tarek Buckmaster
Industrial and Storm Water Permits Unit Supervisor
Permits Section, Water Resources Division
Michigan Department of Environment, Great Lakes, and Energy
517-230-4233 I buckmastert@michigan.gov
Follow Us | **Michigan.gov/EGLE**

From: Buckmaster, Tarek (DEQ)
Sent: Monday, August 10, 2015 5:12 PM
To: Ramach, Sean <Ramach.Sean@epa.gov>
Cc: Ackerman, Mark (ackerman.mark@epa.gov) <ackerman.mark@epa.gov>; Alexander, Christine (DEQ) <ALEXANDERC2@michigan.gov>; Bosak, Amanda (DEQ) <BosakA@michigan.gov>
Subject: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

I was able to get the submitted 316(a) demonstration materials from our Record Center. I am attaching a pdf of the Executive Summary. The full demonstration was submitted in three large volumes that covers a few thousand pages.

I have also attached two documents that provide long-term averages for Great Lakes water levels from 1918-2014. The original demonstration covered 1975-1976 when the maximum plume size of 1,503 acres was measured. The 316(a) hearing on October 21, 1976 included information stating that the largest measured thermal plume was 1,986 acres, but that the plant was not operating at full capacity at that time (2,750 megawatts). At that hearing, DTE stated that modeling predicted that under conservative assumptions, at an output of 3,150 MWs, the maximum thermal plume capacity would not likely exceed 2,500 acres.

The mean water level in Lake Erie from 1918-2014 is 571.33 feet. The 1,503 acre plume was measured in September 1975. At that time, Lake Erie was approximately 572.8 ft. While higher than the mean water level, it was not at an extremely higher level. Lake Erie had recently recovered from a low water period that ran from the mid-50's to 1970.

When the plume was re-evaluated in 2003, Lake Erie was approximately 571 ft. While lower than the mean water level, the level in 2003 was not significantly lower than the mean, nor significantly lower than the water levels in 2014. The four seasonal plumes from 2003 were determined to be 1,373 (winter), 3,188 (spring), 3,002 (summer), and 3,141 (fall). The ambient lake temperature reported for the spring 1976 study was significantly lower than the 2003 study, but the temperatures were similar in summer and lower in 2003 for the winter and fall (see Tables 1. and 2. in the attached 2003 study).

Let me know if you need anything else.

Tarek Buckmaster
Lakes Erie and Huron Permits Unit
Permits Section, Water Resources Division
Michigan Department of Environmental Quality
517-284-5584
buckmastert@michigan.gov

From: Ramach, Sean [mailto:Ramach.Sean@epa.gov]
Sent: Thursday, August 06, 2015 9:49 AM
To: Buckmaster, Tarek (DEQ)
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

Cheers,

Sean Ramach

Environmental Scientist | P:312-886-5284 F:312-692-2502| ramach.sean@epa.gov
U.S. EPA, Region 5, Water Division, NPDES Programs Branch | 77 W. Jackson Blvd., WN-16J | Chicago, IL 60604


Please consider the environment before printing this e-mail.

From: Buckmaster, Tarek (DEQ) [mailto:BUCKMASTERT@michigan.gov]
Sent: Wednesday, August 05, 2015 10:08 AM
To: Ramach, Sean; Ackerman, Mark
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

I am looking to see if I can find data on the lake levels, and have placed an order with our Records Center to retrieve the files that should include the studies. I'll let you know if or when I get the information.

Tarek Buckmaster
Lakes Erie and Huron Permits Unit
Permits Section, Water Resources Division
Michigan Department of Environmental Quality
517-284-5584
buckmastert@michigan.gov

From: Ramach, Sean [mailto:Ramach.Sean@epa.gov]
Sent: Wednesday, August 05, 2015 9:48 AM
To: Buckmaster, Tarek (DEQ); Ackerman, Mark
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

So definitively a 316(a) and actually supports a theory I have had on why 316(a) was promulgated… so cool.

Can the company produce the original 316(a) study documents? If not, then a full 316(a) study should be required as if one did not exist as we do not have the studies to reference, compare and assess. If they cannot be produced, then they do not exist.

The commission specifically called out lower lake levels as an issue of concern. How does current lake levels compare to those when the studies were conducted?

The current maximum generation is below what the study attempted to evaluate (3000 vs 3150MW), but they were not operating at full capacity during the study (only at 2750 MW). Models have improved significantly so this new study should attempt to collect data at full generation, but the modeling will probably be able to address it if not possible. But this should be clear that this is required and clarified that current max generation is only 3000, not the 3150 MW.

We can discuss more, but I really would like to see if the company can produce the original study documents or if you can dredge them up from DEQ archives.

Cheers,

Sean Ramach

Environmental Scientist | P:312-886-5284 F:312-692-2502| ramach.sean@epa.gov
U.S. EPA, Region 5, Water Division, NPDES Programs Branch | 77 W. Jackson Blvd., WN-16J | Chicago, IL 60604

Please consider the environment before printing this e-mail.

From: Buckmaster, Tarek (DEQ) [mailto:BUCKMASTERT@michigan.gov]
Sent: Wednesday, August 05, 2015 8:28 AM
To: Ramach, Sean; Ackerman, Mark
Subject: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet and 316(a) approval

Attached are the spreadsheet with the imbedded calculations/decisions (click on any field to see the basis for the number or decision) for the temperature evaluation at Monroe and the minutes from the October 1976 Public Hearing of the Michigan Water Resources Commission where the 316(a)

demonstration was approved in place of requiring closed-cycle cooling based in part on the cost of installing closed-cycle cooling. The analysis presented to the Commission also set the maximum size of the mixing zone, under conservative maximum operating conditions producing 3,150 megawatts, at 2,500 acres.

Let me know if you have any questions.

Tarek Buckmaster
Lakes Erie and Huron Permits Unit
Permits Section, Water Resources Division
Michigan Department of Environmental Quality
517-284-5584
buckmastert@michigan.gov

From: Bosak, Amanda (DEQ)
Sent: Wednesday, August 05, 2015 8:12 AM
To: Buckmaster, Tarek (DEQ)
Subject: RE: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet

It is in the temp sheet

Amanda Bosak
Aquatic Biologist
Michigan Department of Environmental Quality
Water Resources Division
P.O. Box 30458
Lansing, MI 48909-7958
517-284-5583

From: Buckmaster, Tarek (DEQ)
Sent: Tuesday, August 04, 2015 3:42 PM
To: Bosak, Amanda (DEQ)
Subject: DECO-Monroe Plt Thermal Discharge Comparison Spreadsheet

Hey Amanda,

I spoke with Sean Ramach in Region 5 and he'd like to see the excel spreadsheet version of Appendix I from your Fact Sheet. He has a pdf copy, but he wants to review the calculations used in the chart. Could you send it to me so I can forward it to them? Thanks

Tarek Buckmaster
Lakes Erie and Huron Permits Unit
Permits Section, Water Resources Division
Michigan Department of Environmental Quality
517-284-5584
buckmastert@michigan.gov